



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Life deserve the highest commendation, and every pupil in elementary zoölogy should be made familiar with them.

A laboratory manual to accompany *Animal Forms* is announced as in preparation. This perhaps will throw some light upon the problem of correlation between laboratory work and the use of the text.

Aside from the secondary schools, where undoubtedly the books will have the greatest sale, the combined volume, *Animals*, will offer a mine of information and inspiration to college students who use it for collateral reading. Moreover, it should be especially recommended to the growing body of readers who eagerly seek general books relating to animal life.

M. A. B.

BOTANY.

Notes. — Late numbers of the *Botanical Gazette* contain a descriptive list of the plants collected by Dr. F. E. Blaisdell at Nome City, Alaska, prepared by Miss Eastwood. One hundred and seventy species are recorded, several of them considered as new to science.

In the *Bulletin of the Torrey Club* for February Miss Eastwood describes and figures a number of new Californian anthophytes.

Dr. Rydberg's "Studies on the Rocky Mountain Flora," VII, in the March *Bulletin of the Torrey Club*, contains a number of new Ranunculaceæ, Papaveraceæ, and Fumariaceæ.

In No. 4 of the current volume of *Transactions of the Academy of Science of St. Louis*, Professor Norton discusses the unexplored botanical regions of the Southwest, and describes and figures a number of new spermatophytes.

Several southwestern plants are named by Cockerell in *Torrey* for March.

Several new species of trees from the Eastern and Southern States are described by Ashe in the March number of the *Botanical Gazette*.

Fifty additions to the "Catalogue of Ohio Plants" are made by Kellerman in the *Ohio Naturalist* for December last.

A list of the climbing plants of Ohio is published by Miss Dufour in the *Ohio Naturalist* for February.

Dr. Harshberger gives an account of a botanical ascent of Mt. Katahdin, Maine, in the *Plant World* for February. The article is illustrated by half tones and zonal diagrams.

In Vol. LIII, Part III, of the *Proceedings of the Academy of Natural Sciences of Philadelphia*, Dr. Harshberger has an illustrated paper on the ecology of the San Domingo flora.

Vol. XX of the *Acta Horti Petropolitani* consists of the first part of a "Flora Manshuriæ" by V. L. Komarov, occupied with about one hundred pages of bibliography and discussion, in Russian, followed by the pteridophytes and monocotyledons as far as the Orchidaceæ.

Hemsley and Pearson publish, in No. 224 of the *Journal of the Linnean Society* (Botany), an account of what is known of the flora of Tibet.

A paper by Willis and Gardiner, on the botany of the Maldiv Islands, is published in Vol. I, Part II, of the *Annals of the Royal Botanic Gardens, Peradeniya*.

In the opening number of the current volume of *Nyt Magazin for Naturvidenskaberne*, Prof. N. Wille contrasts the present vegetation of the Norwegian district of Telemarken with the records for the same district published by H. J. Wille in 1786.

A very interesting detailed study of rheotropism, by Professor Newcombe, presented at the Chicago meetings of last winter, has been published in the *Botanical Gazette*.

Mendel's laws of inheritance in hybrids and crossbreeds are discussed by Weldon in *Biometrika* for January, and by Correns in Heft 3 of the current volume of *Berichte der deutschen botanischen Gesellschaft*.

An illustrated article on caprification as practiced in Algeria, appears in the January number of the *Revue horticole de l'Algérie*.

The self-pruning of plants forms the subject of an article by Schaffner in the *Ohio Naturalist* for January.

Photosynthesis is being passed in review by André Richter in current numbers of the *Revue générale de botanique*.

A portrait of the Spanish botanist Colmeiro, with biography, is published by Lázaro e Ibiza in Vol. XXX of the *Anales de la Sociedad Española de Historia Natural*.

A portrait of Alvah A. Eaton forms the frontispiece to the April number of the *Fern Bulletin*.

A portrait of von Heldreich appears on the first page of the *Deutsche botanische Monatsschrift* for March.

Livraison 2 of the current volume of the *Bulletin du Jardin impériale de St.-Petersbourg* contains a portrait of the late Dr. J. Klinge.

In the double number (149-150) of the *Bulletin de l'Académie Internationale de Géographie Botanique* is published an excellent portrait of the veteran Chilian botanist, R. A. Philippi, accompanied by a list of his publications, numbering two hundred and twenty-six entries.

A short biographical sketch of Schweinitz, with portrait, is published by Mr. Shear in the *Plant World* for March.

Vol. II of Radde's *Die Sammlungen des kaukasischen Museums*, published in Tiflis, contains twelve portraits and a considerable number of plates and maps.

Lamarck's herbarium forms the subject of an article by Bonnet in the *Journal de botanique* for April.

Dr. Harshberger has an article on the botanical gardens of Jamaica, in the *Plant World* for March.

Vegetable pathology, and the method of teaching it as practiced in St. Louis, are discussed by Dr. von Schrenk, of the Shaw School of Botany, in the *Bulletin of the Torrey Botanical Club* for February.

Professor Marshall-Ward considers predisposition and immunity, in plant diseases, in Vol. XI, Part V, of the *Proceedings of the Cambridge Philosophical Society*.

In the labels for his exsiccatae of Ohio fungi, reprinted in current numbers of the *Ohio Naturalist*, Professor Kellerman gives transcripts of the original descriptions of the species.

Kellerman and Jennings, in the *Ohio Naturalist* for April, give details of experiments to test the comparative susceptibility of maize and sorghum to *Cintractia* when taken from different hosts.

Fusarium Lini and the "flax-wilt" that it causes are the subject of *Bulletin No. 50* of the North Dakota Experiment Station.

Papers on fungi, by Peck, Salmon, and Long, are published in the *Bulletin of the Torrey Botanical Club* for February.

The ascomycetous genera *Urnula* and *Geopyxis* are considered by Miss Kupfer in the *Bulletin of the Torrey Botanical Club* for March.

Current numbers of *Torreya* contain keys to the species of a number of genera of agarics, by Earle.

The *Botanical Gazette* for July contains the following articles: Arthur, "Uredineæ occurring upon *Phragmites*, *Spartina*, and *Arundinaria* in America"; Nelson, "Contributions from the Rocky

Mountain Herbarium," III; Atkinson, "Three New Genera of the Higher Fungi"; Berry, "Notes on the Phylogeny of *Liriodendron*"; Cook, "Polyembryony in Ginkgo"; von Schrenk, "Root Rot of Apple Trees caused by *Thelephora Galactina*"; and Wilcox, "*Stipa Hassei* not a good species."

The *Bulletin of the Torrey Botanical Club* for June contains the following articles: Kirkwood and Gies, "Chemical Studies of the Coconut, with some Notes on the Changes during Germination"; Curtis, "Some Observations on Transpiration"; Peirce, "Forcible Discharge of the Antherozoids in *Asterella Californica*"; Harper, "*Taxodium distichum* and Related Species, with Notes on some Geological Factors influencing their Distribution"; Nelson, "New Plants from Wyoming," XIV; Wight, "The Genus *Eritrichum* in North America."

The *Annals of Botany* for June contains the following articles: Yapp, "Two Malayan 'Myrmecophilous' Ferns"; Ward, "On the Relations between Host and Parasite in the Bromes and their Brown Rust, *Puccinia dispersa*"; Hill, "On Variation in the Flowers of Certain Species of *Primula*"; Copeland, "The Mechanism of Stomata"; Thiselton-Dyer, "Morphological Notes," VII; Farmer and Hill, "On the Arrangement and Structure of the Vascular Strands in *Angiopteris evecta* and some other Marattiaceæ"; and Fritsch, "Algological Notes."

Vol. XXIII of the *Transactions of the American Microscopical Society*, issued in May, contains the following botanical articles: Jackson, "A New Species of *Crenothrix* (*C. manganifera*)"; and Bessey, "Structure and Classification of the Conjugatæ, with a Revision of the Families and a Rearrangement of the North American Genera."

Heft 9 of Engler's *Das Pflanzenreich*, a volume of 438 pages, with numerous figures, is a revision of Myrsinaceæ by Mez, and bears date May 6, 1902.

A revision of *Conocephalus*, by Bargagli-Petrucci, is a prominent feature of the *Nuovo Giornale Botanico Italiano* for April.

A revision of the Podostemaceæ of India and Ceylon, by Willis, appears in Part III of the *Annals of the Royal Botanic Gardens, Peradeniya*, issued in May.

The laws of plant distribution in alpine regions are analyzed by Jaccard in *Flora* of April 30.

An interesting addition to the botany of the Atlantic islands is a comparative account of the mosses of the Azores, Madeira, and the

Canaries, published, in connection with an article on some mosses of the latter islands, by Cardot, in No. 5 of the *Bulletin de l'Herbier Boissier* for the present year.

No. 10 of Marcus E. Jones's *Contributions to Western Botany*, issued as an individual publication by the author from the Mammoth Record Print of Robinson, Utah, under date of June 1, 1902, contains a revision of the *Alliums* of the Great Basin region, with notes on the markings of the bulbs and a key to the species based on them; further notes on *Astragalus*; a study of the *Nyctaginaceæ*, chiefly of the region of the Great Plateau; and descriptive or synonymic notes on a number of miscellaneous species.

The flora of Scott and Muscatine counties, Iowa, is the subject of a paper by Barnes, Reppert, and Miller, in the recently issued eighth volume of *Proceedings of the Davenport Academy of Sciences*.

A botanical series of the *University of California Publications* begins with the issuance, under date of June 7, of a paper by H. M. Hall, entitled "A Botanical Survey of San Jacinto Mountain." It appears to be a well done piece of work, on the prevalent ecological lines, and is well illustrated.

A catalogue of British marine algæ, by Batters, is in course of publication as a supplement to current numbers of the *Journal of Botany*.

A large part of Vol. III, fasc. 3-6, of *Le Botaniste*, dated June 10, is occupied by a paper on *Euglenia*, by Dangeard.

Cladophora, as represented in the salt water of New England, — a difficult group, — is revised by Collins, in *Rhodora* for June.

Studies of spore germination in the common mushroom and other agarics, by Miss Ferguson, form *Bulletin No. 16* of the Bureau of Plant Industry of the national Department of Agriculture.

The *Geastreæ* of the United States are revised in an illustrated paper by C. G. Lloyd, forming *Bulletin No. 5* (mycological series, No. 2) of the Lloyd Library.

In the *Journal of Botany* for June, Arthur Lister describes and figures a *Chondrioderma*, — *C. asteroides*, — which in aspect resembles to a marked degree a small Geaster.

The *Technology Quarterly* for June contains an article by Whipple on the physical properties of gelatin, with reference to its use in culture-media.

A paper on albino phenomena in the vegetable kingdom, by Pantanelli, is published in Nos. 10-12 of Vol. XV of *Malpighia*.

An account of double fertilization in *Monotropa uniflora* is published by Shibata in *Flora* of December 4 last.

In the *Journal de Botanique* for May, Guignard has an article on double fertilization in Solanaceæ.

The mechanism of secretion of extra-floral nectaries is the subject of an article by Haupt in *Flora*, Vol. XC, Heft 1, which also contains a paper by Lepeschkin on the significance of the water-secreting organs of plants.

Meierhofer has a well illustrated article on the bladders of *Utricularia* in *Flora* of Dec. 4, 1901, which also contains a paper by Brenner on climate and leaf form in *Quercus*, and an extensive study of *Gunnera* by Schnegg.

An account of the developmental history of *Quercus* is given by Brenner in Vol. XC, Heft 3, of *Flora*.

An important addition to the literature of plant physiology, in its economic bearings, is Dr. Whitten's thesis on "Das Verhältniß der Farbe zur Tötung von Pfirsichknospen durch Winterfrost," recently published in Halle.

A handbook of the economic plant products of Ceylon, by Willis and Wright, is in course of publication as supplements to current numbers of the *Annals* of the Peradeniya garden.

An interesting account of the fiber Agaves, by Marshall, is reprinted from the *Journal of Geography* in the *American Journal of Pharmacy* for July.

An illustrated account of the new botanical laboratories at Liverpool is contained in *Nature* for June 12.

Several views of the Cape Town Municipal Gardens are published in the *Gardeners' Chronicle* of June 7.

A portrait of J. B. Ellis forms the frontispiece of No. 62 of the *Journal of Mycology*.

A memorial of the Italian botanist Gibelli is separately issued from Vol. XIV of *Malpighia*.

A biographic sketch of Ramírez, with portrait, is published in the *Memorias y revista de la Sociedad Científica "Antonio Alzate"* of October last.

In *Biometrika* for April, Mr. Yule has a paper on the variation of the number of sepals in *Anemone nemorosa*, and Mr. Tower a paper on the variation in the ray flowers of *Chrysanthemum leucanthemum*, on which subject is added a further note by Pearson and Yule.

An editorial in the same number of *Biometrika* contains some desirable cautions as to the polymorphism of certain species which appears to result from the frequency polygons derived from tabulated individual measurements.

The first fascicle of Vol. III of the *Contribuzioni alla biologia vegetale* of the *R. Istituto botanico di Palermo* contains the following papers of general interest: Terracciano, "Contributo alla biologia della propagazione agamica nelle fanerogame"; Albo, "Sul significato fisiologico della nicotina nelle piante di tabacco"; La Floresta, "Formazione di radici avventizie nelle foglie di *Gasteria acinacifolia*"; Borzí, "Anatomia dell'apparato senso-motore dei cirri delle Cucurbitacee"; and La Floresta, "Struttura ed accrescimento secondario del fusto di *Xanthorrhoea*." The articles are well illustrated and a French résumé is given of their contents.

Rhodora for June contains the following articles: Collins, "Marine Cladophoras of New England"; Nye, H. A., "Blooming of Hepaticas"; Brainerd, "Two more Rare Plants from Lake St. John, Quebec"; Blanchard, "Some Vermont and New Hampshire Plants in the Middle Connecticut Valley," I; Fernald, "The Seneca Snakeroot in Maine"; Webster, "*Clathrus columnatus* in Lawrence, Mass."; Robinson, "Two New Hypericums of the Adpressum Group"; and Fernald, "An Anomalous Skullcap."

The third *Report of the Michigan Academy of Science* contains the following botanical articles: Pollock, "Relation of the Fibro-Vascular Bundles in the Root and Hypocotyl in *Echinocystis lobata*"; Reed, "Ecology of a Glacial Lake"; Larsen, "Disease of the White Birch"; Denton, "Interfoliar Scales of Monocotyledonous Aquatics"; Clark, "Notes on the Flora of Eaton County"; Davis, "Notes on *Utricularia cornuta*"; Davis, "Wolffia Notes"; Longyear, "Notes on Michigan Saprophytic Fungi"; Longyear, "New Species of Michigan Fungi"; Longyear, "Sclerotium Disease of the Huckleberry"; and Conover, "*Asparagus plumosus*."

The *Botanical Gazette* for May contains the following articles: Miyaké, "On the Starch of Evergreen Leaves and its Relation to Photosynthesis during the Winter"; Newcombe, "Rheotropism of Roots" (conclusion); Overton, "Parthenogenesis in *Thalictrum purpurascens*"; Leavitt, "Subterranean Plants of Epiphegus"; Fairchild, "Notes of Travel," VIII; Cockerell, "A New Heliotropium (*H. xerophilum*)."

The *Botanical Gazette* for June contains the following articles : Rimbach, "Physiological Observations on the Subterranean Organs of some Californian Liliaceæ"; Smith, "The Parasitism of *Botrytis cinerea*"; Shaw, "The Development of Vegetation in the Morainal Depressions of the Vicinity of Woods Hole"; Webb, "A Morphological Study of the Flower and Embryo of *Spiræa*"; Fairchild, D. G., "A Precocious Poplar Branch"; and Wilcox, "Numerical Variation of the Ray Flowers of Compositæ."

Botanical papers in No. 7 of the *Bulletin of the New York Botanical Garden* are : Earle, "Mycological Studies," I; Williams, "A Preliminary List of Montana Mosses"; and Hollick, "Geological and Botanical Notes, Cape Cod and Chappaquidick Island, Mass."

Torreya for June contains the following botanical articles : Rydberg, "Our Yellow Lady's-Slippers"; Underwood, "The Bracket Fungi"; Lloyd, "An Interesting Irregularity in a Rose Flower"; and Britton, E. G., "Notes on a Long Island Moss."

The *Bulletin of the Torrey Botanical Club* for May is entirely occupied with Cryptogams, mostly fungi.

Botanical articles in the *Ohio Naturalist* for June are : Kellerman and Tyler, "Further Additions to the Catalogue of Ohio Plants"; Dresbach, "Moulds Injurious to Foods"; and Tyler, "Rosette Plants of Ohio."

A large part of Engler's *Botanische Jahrbücher* continues to be occupied with descriptions of African plants.

As usual with the *Journal of the Royal Horticultural Society*, the number for April contains several articles of general botanical interest.

After an intermission of eight years, the *Journal of Mycology* begins its eighth volume with No. 61, bearing date May, 1902.

The great multiplication of species in *Cratægus* is commented on by Professor Bessey in *Science* for May 16.

A paper by Knuth on the geographic distribution, adaptive structure, and classification of the species of *Geranium*, is published in Engler's *Botanische Jahrbücher* of May 2.

A monograph of the Senecios of North and Central America, by Dr. Greenman, is published as a contribution from the laboratory of the Berlin Garden, in the first Heft for the current year of Engler's *Botanische Jahrbücher*. Keys are given to the sections, under each of which are enumerated the species recognized as belonging to it.

Dr. Holm has an article on the grass genus *Arctophila* Rupr. in the *Ottawa Naturalist* for June. Three new species are described.

An analytical key to the ferns of the northeastern states, based on stipe characters, by C. E. Waters, is printed in the *Johns Hopkins University Circular* for June.

A lecture on the past, present, and future of vegetable pathology, by Dr. G. Mottareale, is reprinted from *Italia Orticola* for March to May.

In *Education* for February, Dr. Harshberger discusses the question as to what part of the varied things comprised in "botany" is of most worth.

In *Popular Science News* for June, G. W. Browning has an illustrated article on insect-catching plants, other than those that are carnivorous.

Spindle formation in *Agave* is the title of a cytological paper by Osterhout, published as No. 8 of the current volume of *Proceedings of the California Academy of Sciences*.

An interesting note on the formation of hair masses in the stomachs of goats that have fed on the fruits of the sweetbrier rose is published by Sir William Thiselton-Dyer in *Nature* for May 8.

A study of galls and the insects producing them, by M. T. Cook, appears in No. 7 of the *Ohio Naturalist*, and is separately printed as a bulletin of the University of Ohio.

Professor Brewer has distributed separates of an article on the relation of forestry to public health, from the *Proceedings of the Twenty-Ninth Meeting of the American Public Health Association*.

The decorative possibilities of some native climbers are shown by Professor Nelson in *Bulletin No. 50 of the Wyoming Experiment Station*.

The *Revue horticole* for June 1 contains an illustrated article on the botanic garden of St. Pierre before its destruction by the eruption of Mont Pelée.

An account of the botanico-geographic regions of North America, as exemplified in the new botanical garden at Dahlem-Steglitz, is given by Professor Engler in Appendix IX of the *Notizblatt des K. Botanischen Gartens und Museums zu Berlin*, dated May 15, 1902.

Several new or little known Southern California plants form the subject of a note by LeRoy Abrams in No. 6 of the current volume of the *Bulletin of the Southern California Academy of Sciences*.

Parts III and IV of Spegazzini's "Nova addenda ad floram Patagonicam," separately issued from the *Anales del Museo Nacional de Buenos Aires*, Vol. VII, bears date of April 16, and includes species numbered from 474 to 977 inclusive, — a considerable number of them being new.

Visitors to the beautiful little island of Capri, in the Gulf of Naples, will find help in a study of its flora in a tasteful little handbook by Cerio and Bellini, entitled *Flora dell' Isola di Capri*, published by Emilio Prass of Naples.

A portrait and biographical sketch of Dr. Adam Kuhn, first professor of botany in America and at the University of Pennsylvania, with an illustration of the genus *Kuhnia*, named in his honor, are published by Dr. Harshberger in the *Alumni Register*, of Philadelphia, for April.

A portrait of Sir George King, formerly director of the Calcutta Garden, is published in the *Gardeners' Chronicle* of May 11.

A note on Parkinson, with figure of the Parkinson statue in the palm house at Sefton Park, Liverpool, is printed in the *Gardeners' Chronicle* for May 17.